

# ERNE

EDRN Information System Architecture

Sean Kelly

# Overview

Recap

Current ERNE status

Architecture

New site details

Challenges

Futures

Summary

recap

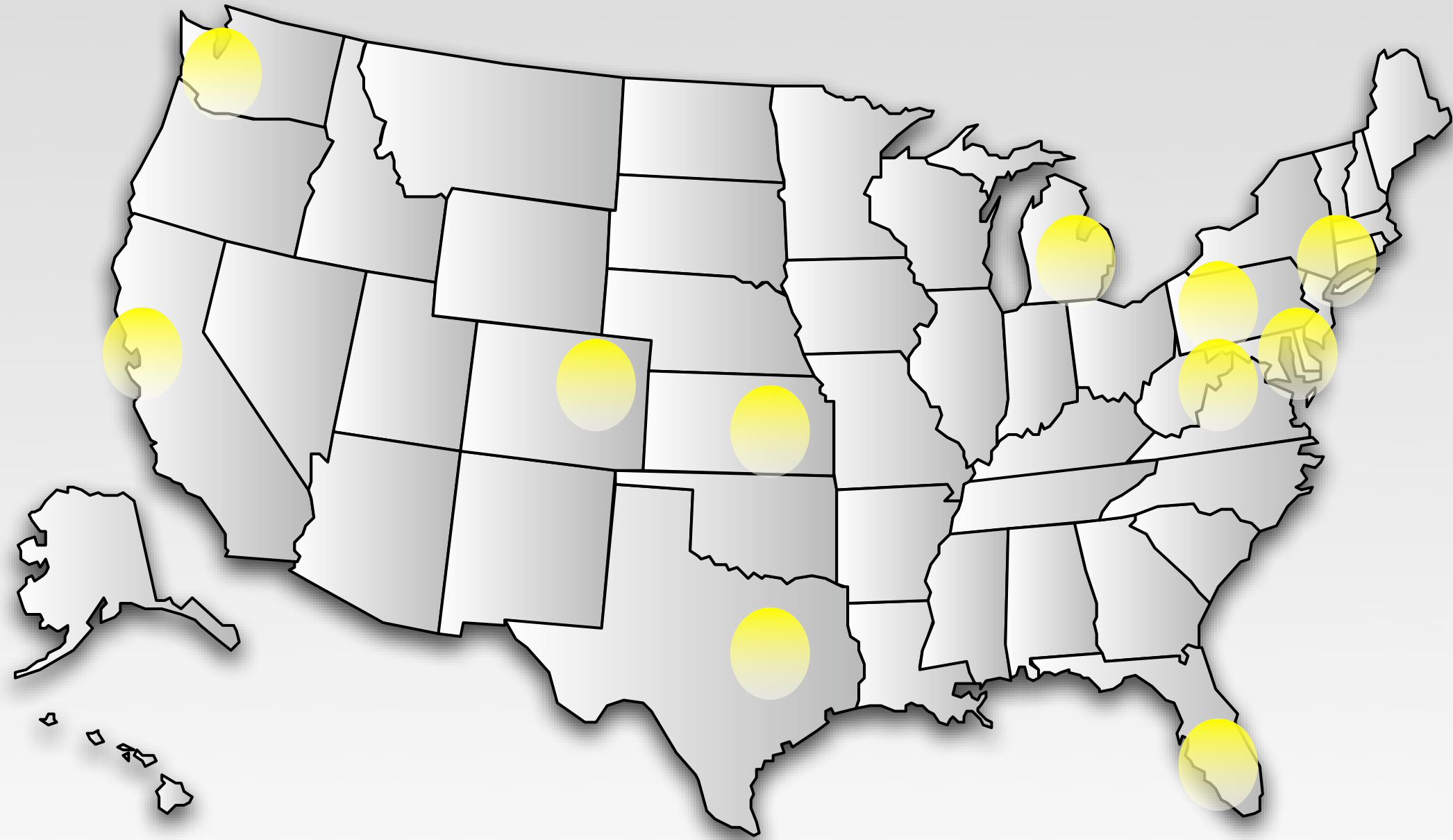
ERNE

what?



virtual specimen bank





non-intrusive

unified

whole

where?

U of Colorado

Brigham & Women's

H Leffitt

Duke U

Beth Israel

MD Anderson

Creighton U

UPMC

GLNE

Fox Chase

UT San Antonio

UCSF



Johns Hopkins

status?

phase 1



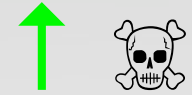
# Moffitt San Antonio

phase 2

Brigham & Women's



Creighton U



MD Anderson



NYU



U Colorado



U Michigan GLNE



UPMC

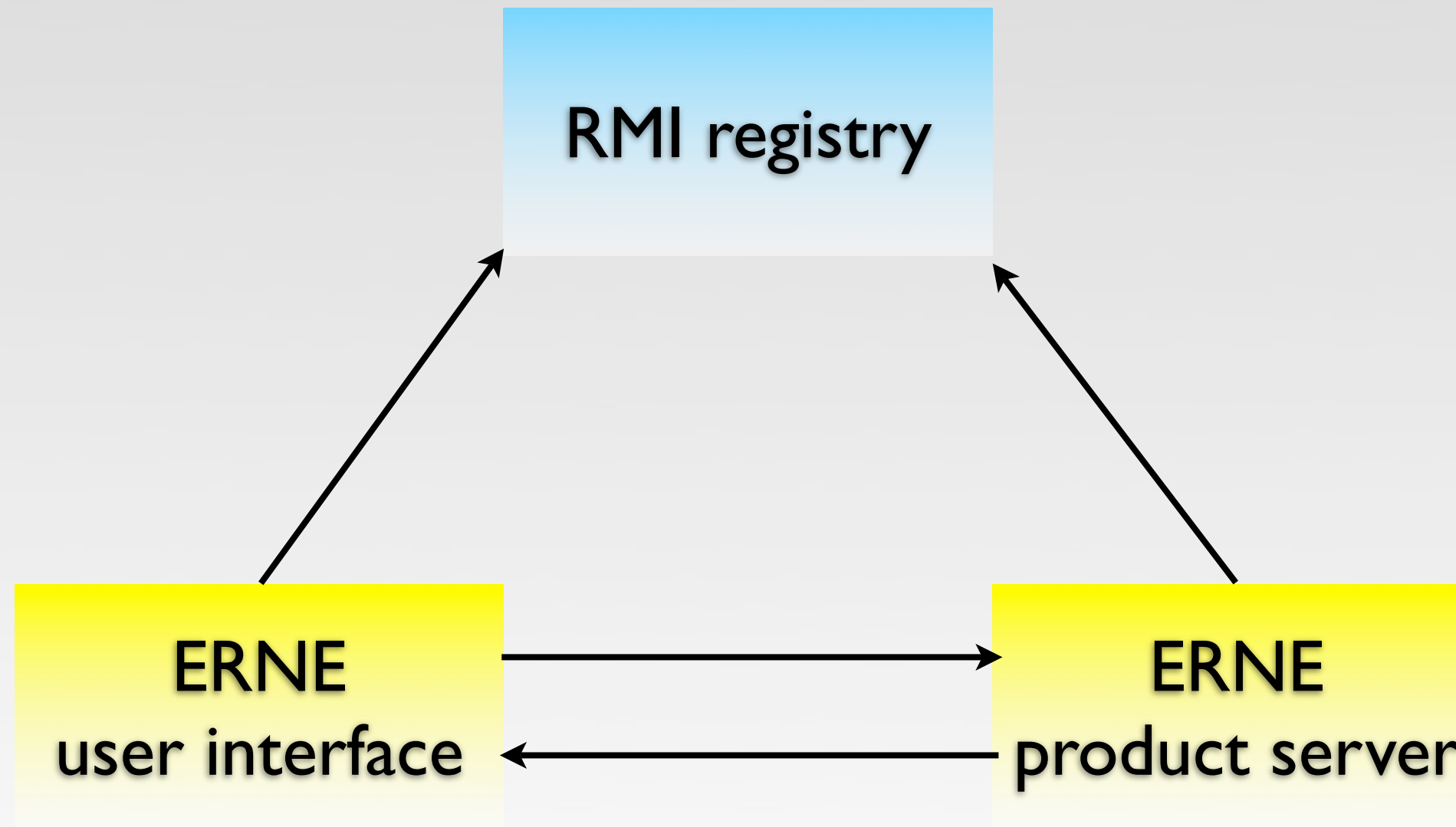


phase 3

work in progress

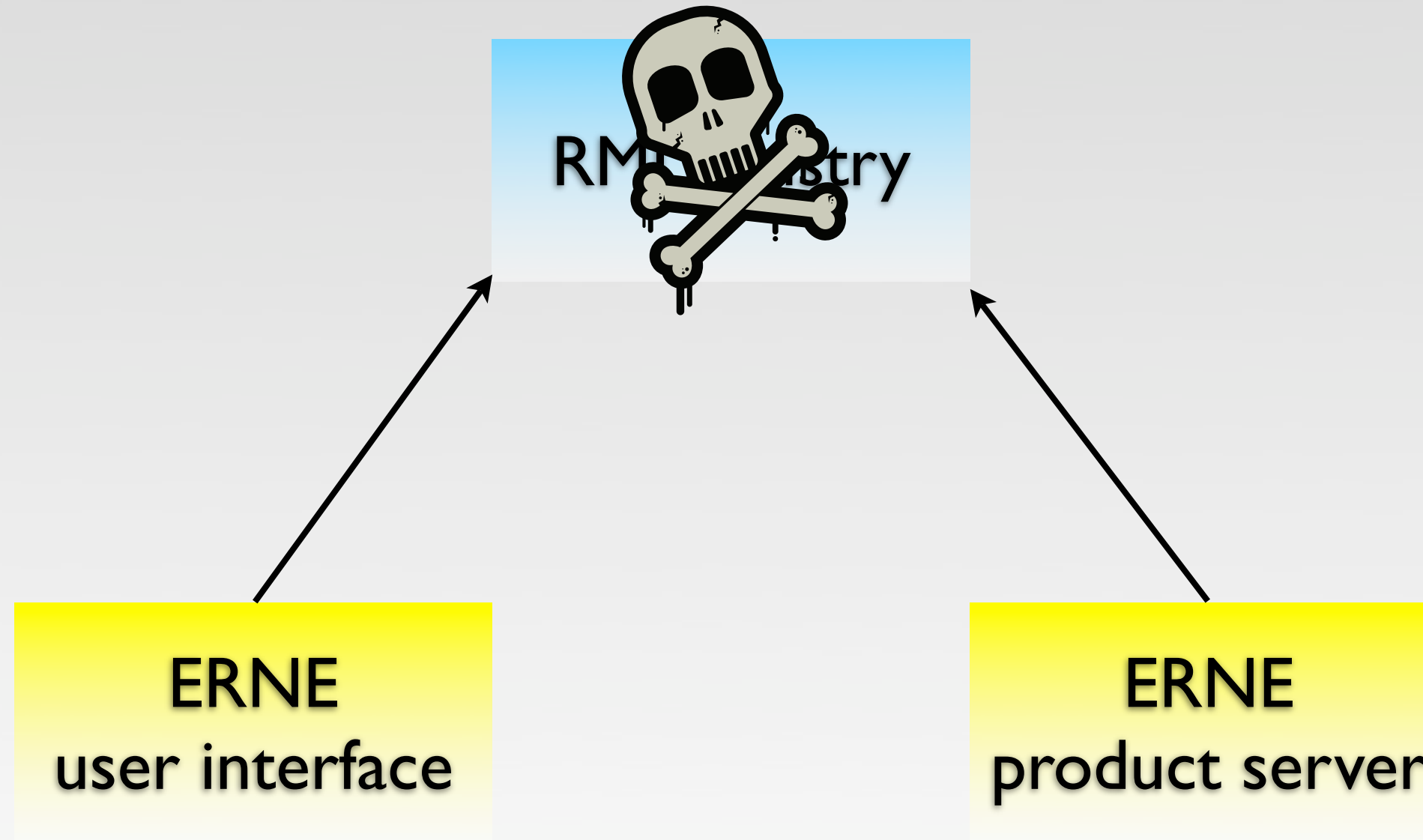
architecture

remote procedure call





single point of failure



move servers

servers never moved

slow

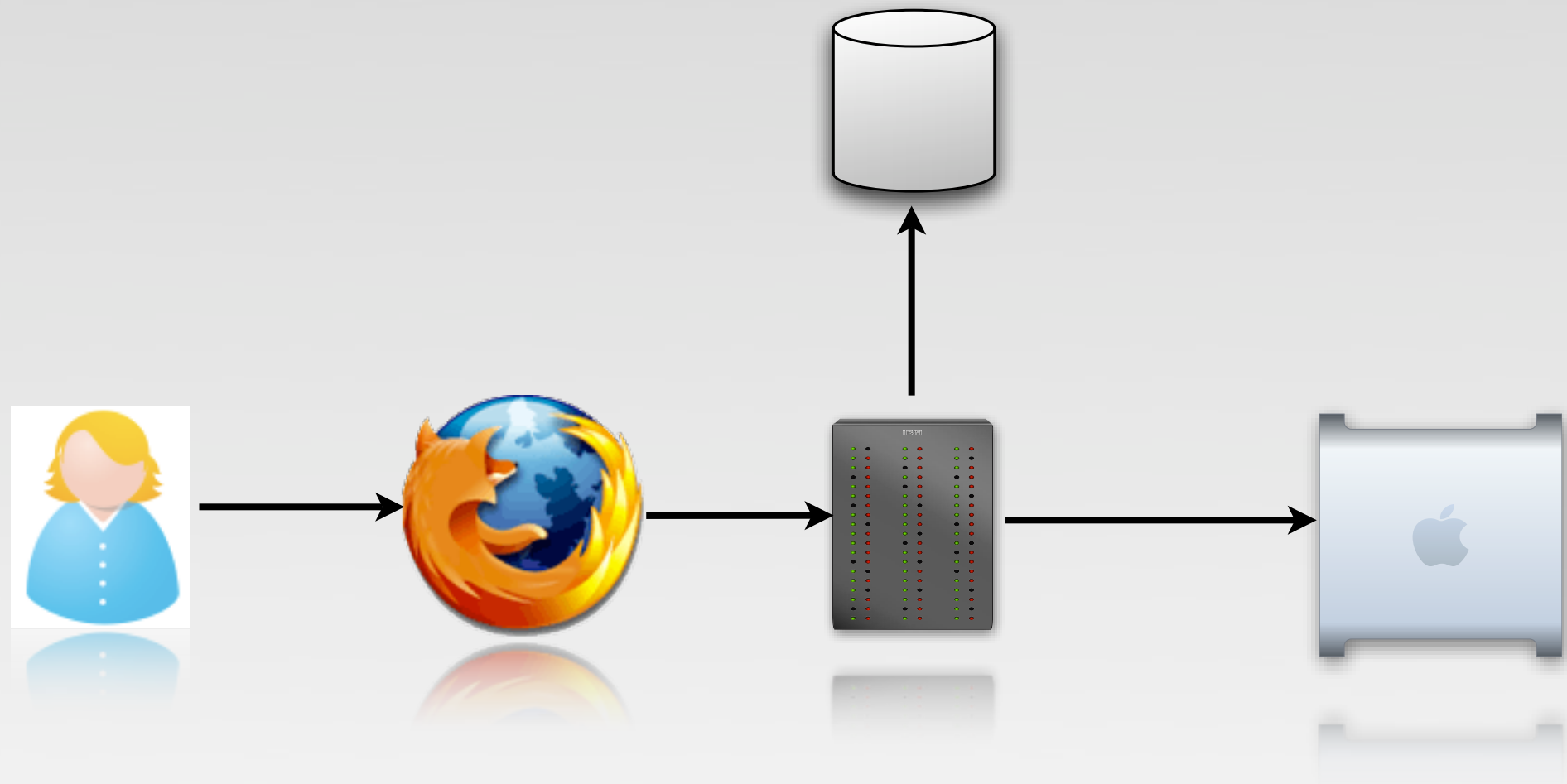
results in discrete packets

# HTTPS





# caching architecture



cache database

# MySQL

query engine

# Zope application

Plone

# Agile OODT



<http://agility.jpl.nasa.gov/>

tested & ready to go

DMCC wants to hold off

upgrading ginger

change to ERNE UI

minor

1 LOC

new sites



Beth Israel  
CDC  
Duke  
Fox Chase  
Johns Hopkins  
UCSF  
“NYU”







IRB  
mapping done

ERNE product server

# Application Review Board

# SSL/TLS



not FIPS 140-2 certified

commercial implementations

IBM

free

AIX  
Linux

# Windows on IBM-branded hardware



IRB  
begun mapping  
installed server



no further progress





performance problem

too many specimens?  
bad indexes?













# caTissue Core

1.0

# MySQL database

nearly functional

# caTissue Core 1.1

?!?



# caTissue Suite

UCSF won't run

?!?!?!\*??!\*



1. Identify responsible persons

THE END

challenges

# challenges

technical  
administrative



# technical

mapping  
database structures  
API







IRB

security policies

staff turnover

network security

classes of support



need ERNE champions

incentive


caching

future

EDRN — EDRN

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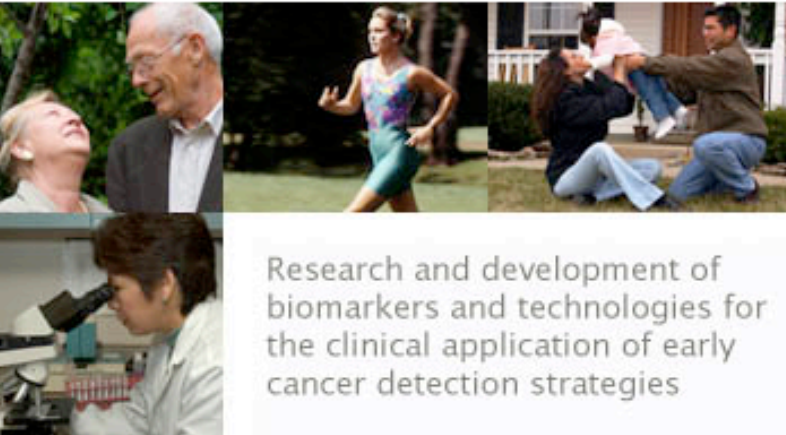

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Research and development of biomarkers and technologies for the clinical application of early cancer detection strategies

## Announcement 04/05/2007

The Division of Cancer Prevention at NCI invites EDRN members to attend the NCI Workshop on Cancer Stem Cells as Targets for Cancer Prevention and Early Detection from May 14–15, 2007, in Bethesda, MD. For more information, [click here](#).

Click below for the announcement of the NCI Early Detection Research Network (EDRN) Program for Rapid, Independent Diagnostic Evaluation (PRIDE) for Cancer Biomarkers  
[Notice Number: NOT-CA-07-003](#)

*(Posted 2007-04-04)*

[\[Archives\]](#)

Welcome to the EDRN! The Early Detection Research Network (EDRN), an initiative of the National Cancer Institute (NCI), brings together dozens of institutions to help accelerate the translation of biomarker information into clinical applications and to evaluate new ways of testing cancer in its earliest stages and for cancer risk.

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requirements?

deploy caching

phase 4



# metrics

who's using ERNE

how frequently

most popular specimens

most popular epidemiological characteristics

most popular sites

speed

reliability

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